NOTIFICATION.

(LAW DEPARTMENT).

No LAW 238 LCR 62, dated Bangalore, the 28th December 1962.

Ordered that the accompanying Notification No. S. O. 3376, dated the 30th October 1962, of the Ministry of Food and Agriculture, prohibiting the manufacture, stock or sale of any vegetable oil product which does not conform to the standards mentioned therein, under the Essential Commodities Act, 1955, which has been published in the *Gazette of India*, Part II, Section 3, sub section (ii), dated the 10th November 1962, be republished in the *Mysore Gazette*, for general information.

By Order and in the name of the Governor of Mysore,

S. SRIPADARAJ,
Under Secretary to Government,
Law Department.

GOVERNMENT OF INDIA.

MINISTRY OF FOOD AND AGRICULTURE

(Department of Food)

ORDER.

New Delhi, the 30th October 1962

S O 3376—In exercise of the powers conferred by sub-clause (1) of Clause 4 of the Vegetable Oil Products Control Order, 1947, as continued in force by sub-section (2) of section 16 of the Essential Commodities Act, 1955 (10 of 1955), and in supersession of the notification of the Government of India in the late Ministry of Agriculture No S R O 780, dated the 21st October, 1950, the Vegetable Oil Products Controller for India hereby prohibits, except as hereinafter provided, the manufacture, stock or sale of any vegetable oil product which does not conform to the following standards, namely —

(1) it shall be prepared by hydrogenation from only such edible harmless vegetable oils or mixtures thereof as are permitted by the Vegetable Oil Products Controller for India,

(2) it shall not contain any harmful colouring, flavouring or any other matter deleterious to health,

(3) no colouring shall be added to it unless with the prior sanction of the Vegetable Oil Products Controller for India and in no event any colour resembling the colour of ghee,

(4) if any flavour is used, it shall be distinct from that of ghee in accordance with a list of permissible flavours and in such quantities as may be prescribed by the Vegetable Oil Products Controller for India

(5) it shall not have moisture exceeding 0 25 per cent,

(6) the melting point as estimated by the capillary slip method (as described in Note I below) shall be from 31° C to 37°C both inlusive,

(7) the Butyro Refractometer reading at 40° C shall not be less than 48 0,

(8) it shall not have unsaponifiable matter exceeding 1 25 percent,

(9) it shall not have free fatty acids (calculated as oleic acid) exceeding 0 25 per cent,

(10) the product on melting shall be clean and clear in appearance and shall be free from sediment and rancidity and pleasant to taste and smell,

(11) it shall contain raw or refined sesame (til) oil not less than 5 per cent by weight but sufficient so that when the vegetable oil product is mixed with refined groundnut oil in the proportion of 20 80, the red colour produced by the Baudouin test (as described in Note II below) shall not be lighter than 2 0 Red units in a 1 cm cell on a Lovibond scale,

(12) it shall be manufactured in premises maintained under hygienic conditions,

(13) it shall contain not less than 25 I U. of synthetic Vitamin 'A per gramme, and

(14) no anti oxidant, synergist, emulsifier or any other such substance shall be added to it except with the prior sanction of the Vegetable Oil Products Controller for India

Provided that where, for any special reason any person finds it necessary to manufacture, stock or sell any vegetable oil product not conforming to any or all of the above standards, such manufacture may be undertaken by him after obtaining the prior permission therefor from the Vegetable Oil Products Controller for India and the product so manufactured is stocked and sold by him in accordance with the Instructions of the said Controller

NOTE I—*The Capillary Slip Method.*—(1) Thin-walled glass tube open at both ends with an external diameter of 1.2 to 1.5 mm. and

internal diameter of 0·83 to 1 1 mm. and length 5 to 6 cm. should be used after proper cleaning and drying.

(ii) The sample of the Vegetable Oil Product should be completely melted and well mixed at a temperature of about 50° C The capillary tube should be inserted into the molten produce so that a column of the product about one cm. long is forced into it The sample in the tube should be allowed to just set by keeping the tube in a horizontal position during winter, and during summer the tube may be put on a perforated metal tray which is so placed inside a small water bath containing water at 15°—17°C. that the bottom of the tray just touches the water.

(iii) The tube is then placed in a test tube immersed in water at 15°—17° C for one hour

(iv) A centigrade thermometer (reading in 1/5th of at degree) should be suspended in the centre of a beaker provided with side tube heating arrangement so that the lower end of the sample column is 3 cm. below the surface of water The initial temperature of the water should be 20°C. The side tube of the apparatus should be heated gently, so that the temperature of water increases slowly at the rate of 2·0°C per minute till the temperature reaches 30°C and thereafter at the rate 1/2 a degree per minute.

(v) The temperature of water should be noted when the sample column) commences to rise in the tube This temparature is recorded as the melting point

The thermometer used in this test should be checked against a standard thermometer calibrated and certified by the national Physical Laboratory, Teddington, England

NOTE II—*The Baudouin Test* —(i) Reagents to be used

(1) Refined (neutralised and bleached) groundnut oil of light colour showing a negative Baudouin Test

(2) Concentrated hydrochloric acid (A. R) solution (sp. gr 1·19 at 15 5/15.5°C) containing not less than 37 per cent H.C.L. by weight.

(3) Furfurol, which has been distilled within 24 hours prior to the test, dissolved in alcohal of not less than 95 per cent strength to give a 2 percent solution (V/V)

(4) Chemically pure dilute hydrochloric acid solution (Sp gi 1.125 at 15·5/15 5°C) containing 24 75 per cent HCl by weight

(ii) *Procedure* —The sample of the Vegetable Oil Product should be completly melted and well mixed at a temperature of about 50°C.

(a) Carry out a test for the presence of colouring matters which are chromogenic in the presence of hydrochloric acid as given in (b) below.

(b) Shake 10 cc. of the melted Vegetable Oil Product with 10 cc of concentrated hydrochloric acid [reagent (2) above]. If there is no development of a red colour in the aqueous layer, apply the Baudouin test as described in (d) below. If a red colour develops in the aqueous layer, proceed as in (c) below.

(c) Shake 15 cc. of the melted Vegetable Oil Product in a separating funnel for half a minute with 15 cc of dilute hydrochloric acid [reagent (4) above]. During the treatment do not permit the temperature of the contents of the separating funnel to exceed that necessary to keep the sample in liquid condition. Draw off the red acid layer which collects at the bottom of the funnel and repeat the process until no further coluration takes place. After the hydrochloric acid layer has been completely removed, apply the Baudouin test to the Vegetable Oil Product so obtained, as described in (d) below

(d) The Baudouin test shall be carried out as follows —

(1) Dilute 10 cc of the melted Vegetable Oil Product to be tested with 40 cc. of refined groundnut oil [reagent (1)].

(2) Take 5 cc of this mixture in a 25 cc. measuring cylinder with glass stopper and add 5 cc. of concentrated hydrochloric and [reagent (2)].

(3) Add 0 4 cc of the alcoholic solution of furfural [reagent (3)].

(4) Shake vigorously for 2 minutes.

(5) Allow to stand for 5 minutes.

(6) Filter the contents of the measuring cylinder through a wet filter paper.

(7) Determine the red colour of the filtrate and express the colour reading in terms of R (Red) units on the Lovibond scale as obtained by using a 1 c m. cell.

(8) Perform a blank experiment by using 5 cc of refined ground nut oil [reagent (1)] in place of 5 cc, of mixture of Vegetable Oil Product and refined groundnut oil and determine the colour in Lovibond scale as under (7) above

(9) Deduct the colour reading obtained under (8) from that obtained under (7) and record as the Baudouin test of the sample

NOTE—The time elapsing between the addition of the furfural solution and the reading of the colour should not exceed 12 minutes.

[No. 2 VP (2)/62/549.]

L G RAJWADE,

Vegetable Oil Product Controller for India.

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